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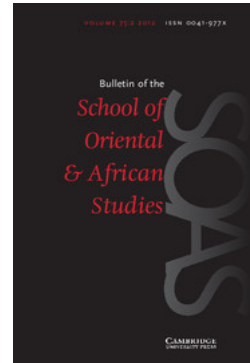
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HOOKER'S EXPENSES IN SIKKIM: AN EARLY LEPCHA TEXT

By R. K. SPRIGG

I. INTRODUCTORY

Some years ago I received from the India Office Library a xerox copy of a short document found at Kew among the papers of Sir Joseph Hooker, with an inquiry as to whether it was a permit for him to travel in Sikkim for the botanical research described in his *Himalayan Journals* (1854/1905). I knew enough Lepcha to be able to report to the India Office Library that the 42 lines of Lepcha script (romanized and translated at (II) below) were some sort of statement of accounts in East India Company rupees (*kúm-pá-nyi kóm tsu*; line 1);¹ but I was not able to arrive at the sense of the text in detail until my present stay in Kalimpong again put me in touch with Lepchas, especially Mr. A. Foning, of the Kalimpong Lepcha Association, whose help it is a pleasure to acknowledge.

In translating the text I also had some help from Hooker himself, once I had found the relevant pages in *Himalayan Journals* (1905, 196-261). A particular difficulty in the Lepcha text that Hooker made it possible for me to solve is the word *sháng-kup* (line 35); the context reads: *ling-com ding-pán di sháng-kup zúng-gri nón-bo ká kóm nyat to-lop bi*, for which my preliminary translation was '(when) the Lingchom Captain came, gave two rupees wages to the *sháng-kup* who went to Jongri'. The Lingchom Captain is referred to by Hooker as 'the Kajee of Lingcham'. The lexical item *-kup* has its usual meaning 'child' or 'boy'; but none of the entries in Mainwaring, 1898, under *sháng*, the commonest of which is 'firewood', fits the context. I was, however, aware that the Tibetan loan-word *cho* '(religious) book' (Tib. *chos*) was sometimes rendered as *sho* in Lepcha; so it occurred to me that *sháng* might be a phonetic spelling for *cháng* (or *chóng*) 'beer' (Tib. *chang*); and Hooker confirmed my guess in the passage '... my friend the Kajee ... was constantly followed by a lad, carrying a bamboo of Murwa beer slung round his neck, with which he kept himself always groggy' (1905, 199).

A further difficulty in the text came from the short clause *da je bá* (line 31), which at first sight seemed to me to mean 'when (he) drank a lake', taking the honorific verb *je* (Tib. *bzhes*) to refer to Hooker; but, after reading the passage in which he described his visit to the Chojo lake, I had cause to change my syntactic analysis: '... the lake lies buried in a deep forest. ... Taking a rupee from me, the priest then waved his arm aloft, and pretended to throw the money into the water, ... shrieking at the top of his voice to the Dryad who claims these woods and waters as his own' (256). As the Lepcha text succinctly puts it: *kóm kát nóng*, 'one rupee went' (line 31). The Lepcha author of the text has, therefore, used the honorific verb *je* as a token of respect

¹ I have used the Mainwaring system of romanization for all Lepcha examples, including those from Mainwaring, 1898, in which Grünwedel, his editor, uses a competing system, but with the following modifications: (i) for Mainwaring's *ch-* and *chh-*, *c-* and *ch-* respectively, consistently with *ts-* and *tsh-*; (ii) for Mainwaring's syllable-initial vowel letters *a-*, *á-*, *i-*, etc., '*a-*', '*á-*', '*i-*', etc., consistently with *ka-*, *khá-*, *gi-*, and all other members of the syllable-initial series; consequently for Mainwaring's *ay-*, which is misleadingly disyllabic in appearance, '*y-*'; (iii) for Mainwaring's superscript symbol *rán*, which he did not romanize (1876, 5), *d*.

For Nepali my romanization follows Turner, 1931, and for Tibetan it follows Wylie, 1959.

for the 'Dryad' (Lep. *da-mít* 'nymph', Mainwaring, 1898, 166), not for Hooker; and *da je bá* should be rendered as 'when the lake consumed (it)' or 'when the lake accepted (it)'.²

The Lepcha text covers these and other such transactions during the period 15 December 1848 to 19 January 1849, while Hooker was travelling from a 11,000-foot pass over the Singalila ridge on the Nepal-Sikkim frontier back to his base at Darjeeling, with his party of 19, including a small Nepalese military escort under a havildar (line 6; Hooker, 1905, 195).

The interest of the Hooker text arises not from the financial details of the journey but from the light it sheds on the status of Lepcha as a written language in the middle of the last century, and on Lepcha orthography at that time, and, therefore, indirectly, on the phonology of the Lepcha language.³

The Hooker text can be precisely dated to the year 1849, which makes it comparable in age to the two dozen or so Lepcha books that B. H. Hodgson, Hooker's host during his stay in Darjeeling (1905, 83), was at that time collecting; these books now form part of the Hodgson Collection at the India Office Library, contained in volumes 77-80. One of the books bears the date [Vikram] *sambat* 1903 (A.D. 1847). At much the same time but on the other side of Darjeeling, the Tukvar spur, two Christian missionaries, Start and Niebel, had begun publishing in Lepcha, their first publication, in 1845, being a lithographed edition of St. Matthew's Gospel. This was followed, in 1849, the year of the Hooker text, by Genesis and part of Exodus, and by St. John's Gospel, both books printed in Calcutta by the Baptist Mission Press. These three facts, the use of Lepcha for the account of Hooker's expenses, the Lepcha books collected by Hodgson, almost all of them in the Lepcha script, and Start and Niebel's having thought it worth their while to publish, and even print, in Lepcha, combine to suggest that Lepcha as a written language must have been in fairly widespread use in the Darjeeling area at that time.

The importance of the spelling used by the anonymous author of the Hooker text is due to the fact that, like the Lepcha books in the Hodgson Collection, it precedes the more widely known spelling of Mainwaring, 1876 and 1898. The difference between Mainwaring's spelling and that of the pre-Mainwaring period is wide enough to lead me to suspect that he may have deliberately departed in some respects from an earlier tradition. There is no doubt that he tried to make a change in the Lepcha script, quite a useful one, in fact: 'I have introduced a sign (which the Lepchas, who have been taught it, have at once adopted) to render the letters when bearing these pronunciations ['a hard rolling trill', 'an aspirated trill', and 'the sound of dr'] easily distinguishable. A dot under the letter effects this, thus

Kra Hra Ra.

² Mr. Foning, however, takes *je* to refer to Hooker, and to mean 'saw' or 'visited', in this passage and in lines 17 and 34, as an extension of the sense of *je* beyond the gloss given in Mainwaring, 1898: 'eat or drink, receive, accept, accept offerings, said of *rum* [god]'; cf. Tib. *bzhes* 'take, receive, accept; ... especially at meals, to take, to eat' (Jäschke, 1881/1934).

³ Besides Lepcha only two out of the many Tibeto-Burman languages spoken in the Nepal-Sikkim Himalaya have developed writing, and scripts of their own, Limbu and Newari. For Limbu see Sprigg, 1959, for Newari cf. Sprigg to appear, (c), and for Lepcha, Sprigg to appear, (b). According to one tradition, recorded in *Sikkim*, 1894, the 3rd Maharajah of Sikkim, Chador Namgyal (1700-17), devised a script for his Lepcha subjects (13); a Lepcha tradition, however, ascribes the script to a Lepcha, Thikung Men Salong, minister of a Lepcha king, Turve Pano, c. 1400 (Siiger, 1967, 27). The two traditions are not necessarily completely in conflict: the 3rd Maharajah might have delegated the responsibility for the script to a native speaker of the language, possibly Thikung Men Salong, who loyally gave the credit for his work to his royal master.

Lepchas sometimes give these pronunciations to words that ought not to possess them, the following of this error ought to be guarded against' (1876, 11). He was also critical of Lepcha pronunciation and spelling: 'the Lepchas are apt to pronounce this letter [*o*] as *u*, and hence when writing, to confound it with *ú*, this error should be avoided, and corrected in the Lepchas' (1876, 9); indeed, he was prepared to go further, and make changes in Lepcha pronunciation: 'Wa, should be pronounced with the *full rounded sound* of the English W;* *It is not pronounced so *generally* by the Lepchas, but should be taught so' (1876, 8). It therefore seems to me not improbable that he should have tried to improve on the spelling of older traditional works such as *ta-she súng*, which he is known to have used in compiling his dictionary (Grünwedel in Mainwaring, 1898, II).⁴

Grünwedel, as editor of the *Dictionary* (Mainwaring, 1898), followed his author's usage in the main, but not uncritically: 'I sought in vain for any attempt at arranging the matter according to etymological principles. Nearly all the various spellings represented by the native manuscripts, nearly all the differently written prefixes and their combinations had been incorporated in extenso, . . .' (III). The influence of the 'etymological principles' is to be seen in such remarks of Grünwedel's as: '. . . in certain cases a difference arose between the assumed authority of orthography (the Bible translations) and the etymology. . . . The question whether to write *ya*, *ye*, *e* so well known to all students of modern Indian manuscripts was decided according to etymology; I wrote *nyan* causative of *ngán*, *nyan* from T. *nyan*-(*ba*); but *nyen* milk: all three roots are written *nyan* (or even *nyán*) and *nyen* in *ta-she-súng* Msepts. promiscuously, etc. etc.' (IV). It seems to me a pity that Grünwedel should have treated the orthography of the Bible translations as more authoritative than that of Buddhist books written in conformity with an older orthographic tradition. He even ignores some of the spellings to be found in the 15 lines of Lepcha script from the Berlin manuscript of the *ta-she súng* that he himself gives as an example of his method (XII), e.g. (Berlin-manuscript spelling at (i), Grünwedel's at (ii))

- (i) *bi*, *li*, *thi*, *dí*, *mík*, *'it*, *thík*,
 (ii) *bí*, *byí* (*byi*, 256), *lí*, *thí*, *dí*, *dí*, *mík*, *'yit*, *thík* (*thík*, 272) (cf. also section III.A below).

There is, therefore, a possibility that Mainwaring and Grünwedel may have given a somewhat misleading impression of Lepcha phonology to specialists in Sino-Tibetan comparison and reconstruction, who usually know Lepcha only through the orthography of Mainwaring, 1876, and Mainwaring, 1898.⁵ I have therefore taken the opportunity of making an inquiry into the symbolization of certain Lepcha vowel units in the short Hooker text, dating back to the

⁴ Mainwaring's attitude towards Lepcha was influenced by his conviction that it was 'the oldest language extant', 'pre-eminently an *Ursprache*', and 'unquestionably far anterior to the Hebrew or Sanskrit' (1876, xx). His 'system' of 'the rudimental power of letters' led him to compare a number of Lepcha words with supposed cognates in Arabic, Hebrew, Greek, Gothic, and English, e.g. '*shi re* the sight, *scire* to know, to ken (compare Goth. *kann*, Tib. *khyen*, Lep. *khyen* to know, also Lep. *ko* to comprehend, to be cunning); (whence also, English *can*, Lep. *khu* to be able' (1876, xi); and 'take examples of *h* in the pronouns (the pronouns, primitively, representing the First Being); Lep. *hó* thou (the Being); Lep. *hu*, Sax. and Eng. *he* (the Being); Lep. *hu-sa hu-s* (of he), Sax. and Eng. *his* (the Being's); Inflection, Lep. *hum*, Sax. and Eng. *him*' (1876, 103).

⁵ Benedict, for example, suggests that 'Lepcha (or Rong), which exhibits many of the transitional qualities of Kachin, might equally be regarded as a separate nucleus linking Tibetan-Kanauri with Bahing-Vayu and groups on the south' (1972, 8); this would elevate Lepcha to

pre-Mainwaring period, in comparison with that of subsequent works, Mainwaring, 1876 and 1898, and Tamsang, 1981.

Since my interest in the Hooker text is orthographic and phonological rather than stylistic, my first translation of it (section II) is a word-for-word translation. I have added current spellings of place names, where they differ from Hooker's, as given in Karan, 1969, page references to Hooker, 1905, and occasional notes, especially on units of currency. I have romanized the text in accordance with the Mainwaring system (1876, 2-5) rather than the Grünwedel (Mainwaring, 1898, X), but with minor modifications (note 1). The 42 lines of text are numbered from 1 to 40, with two additional lines, later insertions, numbered -1 and 5a, and passages that had been crossed out enclosed in square brackets.

(The literal translation that follows is supplemented by a version in which I have tried to capture the style of the original. See Appendix, pp. 323-5.)

II. THE HOOKER TEXT

- 1 *sung-li hyók di bá sa-'ár zo hik so bá*
 'Singalilah' cross came-when goat rice fowl served-when
 Singalila, 15/12/1848; Hooker, 1905, 196
búk-shi thá-lá kát bi
 baksheesh *thala* one gave
 8-anna piece
- 1 *kúm-pá-nyi sa kóm tsu gum. rá la-vo nyar sam*
 Company-of rupee accounts is. *rá* moon wane three
kampani (Nep.) 2nd month
tsóng ling-com ká thi lung thá-lá kát sa vóm
 completed 'Lingcham' -to reach-ing *thala* one-of salt
 Lingchom
- 2 *pár. kóm kát sa thá-lá zo pár. mú-se-mo lót*
 bought. rupee one-and *thala* rice bought. Muse go-
 Of mixed Lepcha
bo sang ká zo-cú tsho 'á-ná bi. thi tsóng
 -er-s-to journey-rice six anna gave. reach completed
 descent *cha* (Nep.)
- 3 *thi nyen 'á-ná nyat lon 'á-ná nyat sa nyen [bóm*
 reached milk anna two-after anna two-of milk [total-
lung thá-lá shúk-ki gum]. kur-dong 'á-ná nyat. bá-dang
 -ing *thala suki* is]. plantain anna two. Badong
 4-anna piece
kóm
 rupee

the same status as that of the seven 'primary divisions or nuclei': 'Tibetan-Kanauri', 'Bahing-Vayu', 'Burmese-Lolo', 'Kuki-Naga', etc. (1972, 5). More recently, Chang and Chang, 1975, makes considerable use of Lepcha forms in reconstructing Common Tibetan-Gyarong, and claims: 'the frequent usefulness of comparisons with Lepcha will be apparent in our discussions below' (398). Most recently, N. C. Bodman, who made a phonemic analysis of Lepcha in Kalimpong in the 1960s, uses Lepcha fairly widely in Proto-Chinese reconstruction in Bodman, 1980.

As an example of the way Lepcha spelling can mislead, I will cite two passages from Benedict, 1972: (i) 'Lepcha (*á-myal* ~ (*ä-myel* < **s-mal* ~ **s-mel*' (15), and (ii) 'Lepcha *fo-nyāl* ~ *fo-nyel* < **s-nāl* ~ **s-nel*' (16). As I point out below (III.B.2.a.ii, Nasal-initial syllables), *myāl/myel* and *nyāl/nyel* are each a set of variant orthographic forms for lexical items with the single syllable final -ɛl; so there can be no variation in the reconstructed form: **-el* (as opposed to **-il*) is sufficient.

- 4 'á-nyo ká nyat bi. póng-cen thít bo ká 'á-ná nyat
lady-to two gave. messenger arrive-er-to anna two
bi. [bóm lung kóm sam gum]. 'án hík kát fár
gave. [total-ing rupee three is]. and fowl one price
'á-ná nyat
anna two
- 5a líng-com to sóm-pu nón bo fa-lí ká kóm fa-lí bi.
'Lingcham' up bridge go-er four-to rupee four gave.
- 5b nyar fa-ngo tsóng líng-com nun tul nóng syo bá
wane five completed 'Lingcham'-from upwards go-will-when
kur-dong sa kyo ta-'i bu-lát so bo ká lót
plantain-and barley flour bring serve-er-to return
búk-shi thá-lá kát
baksheesh thala one
- 6 húl-dár nun dú-hi tsár 'á-ná sa lyo mór 'á-ná kát
havildar-by curds four anna-of received butter anna one-
havalḍār dahi cār (Nep.)
sa lyo. krá-tshóng yuk-dyan ká thá-lá kát
of- received. hermitage letter-faith-for thala one
[bóm lung kóm
[total-ing rupee
- 7 kát sa 'á-ná ka-kyak gum]. rung-nyít 'úng thi
one-and anna seven is]. 'Rungeet' water reach
tsóng hík-ti pi-shá fa-ngo [bóm lung thá-lá kát gum].
completed egg pice five [total-ing thala one is].
- 8 rung-nyít 'úng thi tsóng 'óng nyat ká 'á-ná nyat
Rangit
bi. mung-bryo ká hík fár 'á-ná nyat bi.
gave. 'Mungbreu'-at fowl price anna two gave.
Mangbru
kyo-jíng ká
Kewzing-to
- 9 thi hík fár thá-lá kát bi. ka-jú fár kóm
reached fowl price thala one gave. dog price rupee
kát bi. líng-dam ká thi hík kát ká thá-lá bi
one gave. 'Lingdam'-to reached fowl one-for thala gave
hík kát
fowl one-
- 10 ká tsho 'á-ná bi. tsha sám tsóng nyóng-góng
-for six anna gave. date three completed 'Neongong'
Yangang
thi lung cul dúr-jí-líng* rák nón bo ká kóm kát
reach-ing down 'Darjeeling' mail go-er-to rupee one
ḍāk (Nep.)

* Although all 42 lines of text are clearly in the same hand, the author's spelling of the word for 'monastery', a Tibetan loan-word, varies between *gám-po* (17), *gám-pú* (17), and *gám-bo* (34) [Tib. *dgon-pa*], and for 'Darjeeling' between *dúr-jí-líng* (10) and *dor-jí-líng* (38-9).

- bi.* *zo pá*
gave. rice buy-
- 11 *ká thá-lá kát nóng. nyóng-góng nyen fár 'á-ná nyat*
-for *thala* one went. 'Neongong' milk price anna two
bi. *kyo-jíng hík-ti fár 'á-ná nyat. sa-nyek ká*
gave. Kewzing egg price anna two. 'Sunnook'-to
Senek, 31/12/48
thi
reached
- 12 *thá-lá kát hík far bi. nyen sa lá-buk mung-gú*
thala one fowl price gave. milk-and radish garlic
bi *chó lung thá-lá kát bi. krá-shi dǐng thi*
vegetable agree-ing *thala* one gave. 'Tassiding' reach-
Tashiding
lung kóm
-ing rupee
- 13 *kát zo pá. tsha ka-kyak tsóng pem yóng-tsu*
one rice bought. date seven completed 'Pemiongchi'
Pemayangtse
thi lung tuk-tuk kát fár thá-lá kát bi. má-nyi
reach-ing cap one price *thala* one gave. 'mani'
gyóng bo ká thá-lá
chant-er-to *thala*
- 14 *kát bi. tsong kát ká thá-lá kát bi. chúng-pung ká*
one gave. ?Limbu one-to *thala* one gave. 'Tchongpong'-to
Chongpong
thi lung ci sa zo so bo ká kóm kát bi. zo
reach-ing beer-and rice serve-er-to rupee one gave. rice
thi tsóng
arrive completed
- 15 *kóm fa-li sa shúk-ki zo pá. lúk lung kóm kát*
rupee four-and *suki* rice bought. rise-ing rupee one
shúk-ki zo pá. hík kát sa hík-ti sa nyen sa
suki rice bought. fowl one-and egg-and milk-of
chó lung thá-lá kát
agree-ing *thala* one
- 16 *bi. 'ík ta-'yu kát mun hík nyat sa zo-hyu bu-lát*
gave. and woman one-by fowl two-and rice-pure brought-
bá bār 'á-ná búk-shi bi. tsha ka-ti nyat thap
-when twelve anna baksheesh gave. date ten two-teen
bāra (Nep.)
tsóng rúp-dí
completed 'Doobdi'
Dubdi (Tib. *sgrub-sde*)
- 17 *gám-po ká⁶ thi bá yúk-mun ká kóm nyat bi.*
monastery-to reached-when priest-to rupee two gave.
sá-hep do gám-pú je ká kóm sam bi. tsha
Sahib self monastery accept-for rupee three gave. date
sam thap tsóng zúng-gri
three-teen completed 'Jongri'
Dzongri

- 18 *lem nóng shi tsóng ci-bu sa hík-ti lá-buk*
towards go-about-to completed beer-load-and egg radish
bu-thít bo ká kóm kát sa shúk-ki búk-shi bi.
carry-arrive-er-to rupee one-and suki baksheesh gave.
gom-chen nun nyen sa lá-
hermit-by milk-and rad-
- 19 *-buk sa hík-ti ka-ku bu-thi so bo ká búk-shi*
-ish-and egg eight carry-arrive serve-er-to baksheesh
thá-lá kát bi. tsha ka-kyót thap tsóng zúng-gri
thala one gave. date nine-teen completed 'Jongri'
nun yak-sóm
-from 'Yoksun'
Yuksam
- 20 *ká lót thi tsóng ta-'yu kát nun ci-bu kát hík*
-to go reach completed woman one-by beer-load one fowl
'á-bu 'á-mót nyat sung-gú kól-pót sa bu-thi bá
male female two garlic walnut-of carry-arrive-when
sá-hep
Sahib-
- 21 *sa búk-shi kóm kát shúk-ki bi. rúp-di sa 'á-nyi*
-of baksheesh rupee one suki gave. 'Doobdi'-of nun
cú lá-mo thi bá sa-'ár kát hík kát hík-ti ka-ku
arrived-when goat one fowl one egg eight
?Personal name
- 22 *mór sóng-cúng fa-li zo fri kát mung-gú mát bu-lát*
butter copper-small four rice fri one garlic make brought
zangs-(chung?) (Tib.), bre (Tib.) measures
bá búk-shi kóm kát shúk-ki bi. 'ú-cho móng
-when baksheesh rupee one suki gave. clergy many-
(Tib.) *dbu-chos mang*
- 23 *nun ci to-ró nyat zo-hyu fri kát hík-ti fa-li nyen*
-by beer napkin two rice-pure bre one egg four milk
bo-tól nyat bu-thi bá sá-hep búk-shi thá-lá kát
bottle two carry-arrive-when Sahib baksheesh *thala* one
botal (Nep.)
- 24 *tsha nyi-shú tsóng bá-dang yá-bo sa ma-ró kát nun*
date twenty completed Badong high-rank-of person one-by
hík kát 'á-rók pa-tek kát nyen shing re sóng la
fowl one arrack vessel one milk wood-the trade-for
?tshóng la (28)
bu-thi bá búk-shi
carry-arrive-when baksheesh
- 25 *kóm kát bi. zúng-gri nóng bá lóm su bo ká*
rupee one gave. 'Jongri' went-when road accompany-er-to
bár-ro 'á-ná bi. zo fár kóm kát bi.
twelve anna gave. rice price rupee one gave.
bāra (Nep.)
khyum-shum ye tsong
house-?small ?Limbu-
?cum (?place name, perhaps 'Buckeem', 239, Bakkhim)

- 26 *nun cu-bu kát zo fri kát hík-ti ta-rak sa*
 -by ?beer-load one rice bre one egg six-of
?ci-bu, line 20
bu-thi bá búk-shi kóm kát shúk-ki bi.
 carry-arrived-when baksheesh rupee one suki gave.
ci-nye yu nun hík-
 Steward descend-after egg
spyi-gnyer (Tib.)
- 27 *-ti ka-ku zo-hyu fri kát bu-lát ba búk-shi thá-lá*
 eight rice-pure bre one brought-when baksheesh thala
kát sa shúk-ki bi. yak-sóm ká tsha nyi-shú
 one-and suki gave. 'Yoksun' -at date twenty
- 28 *tsóng sá-hep sa kóm khá kát tát ba sa-'ár kát*
 completed Sahib-of rupee score one gave-when goat one
ci-bu kát shíng re tshóng la mát bu-thít bo ká búk-shi
 beer-load one wood-the trade-for do brought-er-to baksheesh
- 29 *kóm nyat bi. yak-sóm nyen fár 'á-ná sam bi.*
 rupee two gave. 'Yoksun' milk price anna three gave.
nyar kát tsóng líng-shú góng ká thi lung zo sa
 wane one completed 'Lungschung' temple-to reach-ing rice-and
hík-ti
 egg-
- 30 *sa nyen sa búk mung-gú shíng re so bá búk-shi*
 -and milk-and yam garlic wood-the served-when baksheesh
kóm nyat bi. khe-sho pe-ri gám-pú je ká kóm
 rupee two gave. 'Katsuperri' monastery accept-for rupee
mkha'-spyod dpal-ri
kát nóng.
 one went.
- 31 *da je bá kóm kát nóng. pun-lok yu nun*
 lake accepted-when rupee one went. monk descended-after
lóp-kro bo móng nun zo ci lá-buk vót-thu pa-tek
 school-er many-by rice beer radish vót-honey vessel
slob-grwa (Tib.) species of bee
so bá
 served-when
- 32 *búk-shi kóm nyat bi. nyar nyat tsóng tíng-leng ká*
 baksheesh rupee two gave. wane two completed 'Tengling' -to
 Thinglen (8)
thi bá kyú-mi nun sa-'ár kát ta-fá móng bo nun
 reached-when magistrate-by goat one tafa millet gave-after
 parched rice
ci-bu
 beer-load

- 33 *zo shíng re mát so bá búk-shi kóm sam bi.*
 rice wood-the make served-when baksheesh rupee three gave.
'án kóm nyat kát bi. cúng-pung ká zo thá-lá
 and rupee two one gave. 'Tchongpong'-at rice *thala*
 Chongpong
kát sa pár
 one-of bought
- 34 *chá-ngá shá-líng gám-bo ká thi nyar sam tsóng*
 'Changachelling' monastery-to reached wane three completed
gsang-sngags chos-glíng
thi gám-bo je ká kóm nyat nóng. zo
 reached monastery accept-for rupee two went. rice-
sa vóm chó-chó lung kóm
 -and salt agree-ing rupee
- 35 *kát sa pár. líng-com dít-pán di sháng-kup zúng-gri*
 one-of bought. 'Lingcham' Captain came 'beer-boy' 'Jongri'
 ?chang
nón bo ká kóm nyat to-lop bi. tít-leng nun
 go-er-to rupee two ?wages gave. 'Tengling'-from
 ?talap (Nep.)
- 36 *to bu-dít bo nyat ká thá-lá kát ló bi. nyar*
 load carry-come-er two-to *thala* one wages gave. wane
fa-li tsóng ka-lyat 'úng ká thi dá bá nyen
 four completed 'Kulhait' water-to reach rest-when milk
 Kalet
fár shúk-ki
 price *suki*
- 37 *kát bi. 'o-re nun hróng hi ká thi to bun bo*
 one gave. that-by climbed 'Hee'-to reached load carry-er
ká kóm kát bi. nyar ta-rak tsóng rung-
 -to rupee one gave. wane six completed 'Rungeet'
- 38 *-nyít go-rát ká thi dá bá zám-dár nun shi-dó*
 Garat-to reach rested-when jemadar-by ?tobacco
 (Nep.) *jamdār ?bzhes-tha* (Tib.)
so bá búk-shi kóm kát bi. ka-lyat nun
 served-when baksheesh rupee one gave. 'Kulhait'-from
dor-
 'Darjeeling'
- 39 *-ji-líng to bu-thít bo ká kóm kát ló bi. gun*
 load carry-arrive-er-to rupee one wages gave. all
- 40 *gun-jam bóm lung*
 altogether collect-ing

III. COMMENTS ON THE ORTHOGRAPHY OF THE TEXT

Points of interest in the spelling of the Hooker text arise from the author's usage with regard to (A) *i* and *í*, and (B) *a*, especially as opposed to *á*, *e*, and *ó*.

A. *i* and *í*

The author of the Hooker text's usage with regard to what Mainwaring calls the 'short accent' and the 'long accent' vowel symbols *i* and *í*, the latter of which incorporates the superscript symbol *rân* (1876, 8–9), is completely systematic: *i* occurs only in vowel-final syllables, e.g. *sung-li*, *dí*, *búk-shí* (line –1), and *í* only in consonant-final syllables, e.g. *hík*, *líng-com*, *thít* (lines –1, 1, 4).⁷ The two symbols –*i* and –*í*– are, therefore, complementarily distributed in relation to type of syllable final. In fact the sole function of the superscript *rân* component of the *í* symbol seems to be to draw attention to the presence of a final-consonant symbol (*k*, *ng*, *t*, *n*, *p*, *m*, *r*, *l*), all of which symbols are also superscript with the exception of *ng*, which is prescript. The seven superscript final-consonant symbols are sandwiched between the *rân* and the initial-consonant symbol.

The usage of the Hooker text is the same as that of Tamsang, 1981, except that Tamsang uses only *í* in syllables containing initial *c*, *ch*, *j*, and *ny* regardless of whether those syllables are of the vowel-final or the consonant-final type; it also agrees with the usage of the 15-line excerpt in Lepcha script from the Berlin manuscript of the *ta-she sung* given by Grünwedel in Mainwaring, 1898 (XII; cf. section (I) above), in which *i* is used in the vowel-final syllables *bi*, *li*, *thi*, and *di*, while *í* is used in the consonant-final syllables *thing*, *mík*, *'it*, *thík*, *shím*, and *jím*. Mainwaring's usage is almost the reverse of this; and all the examples in the Hooker text that contain *i* (at (i) below) are symbolized with *í* in Mainwaring, 1898 (at (ii) below):

(i) *sung-li bi thí fa-li ta-'í cí ka-tí frí nyí-shú*

(ii) *sung-lí byí (bí) thí fa-lí ta-'í cí ka-tí frí nyí-shú*

(lines –1, 1, 2, 5a, 5b, 7, 14, 16, 22, 24), except that for *di* (line –1) Mainwaring, 1898, gives both *di* and *dí*, while Mainwaring, 1876, gives only *dí* (111); and six of the seven lexical items that have *í* in the Hooker text have *i* in Mainwaring, 1898:

(i) *hík líng rung-nyít 'ík shíng dít-pán*

(ii) *hik líng rung-nyit 'ik shing dít-pán*

(lines –1, 1, 7, 16, 24, 35); and the exception, *thít* (lines 4, 18, 39), though it has the spelling *thít* in Mainwaring, 1898, is spelt *thít* in Mainwaring, 1876 (111).

It is noteworthy that the syllables in which Mainwaring uses *i* are commonly those containing (i) final *k* or *ng*, (ii) final *n*, or (iii) final *r* or *l*, e.g. (i) *hík*, *'ík*, *bík* 'cow', *líng*, *shíng*, *dít* (1898), (ii) *lín* 'speak', *byín* 'give', *nyín* 'be' (1876, 47, 47, 106: but Mainwaring, 1898, has both *byín* and *byín*, and *nyín* and *nyín*), (iii) *kir* 'pick out', *pyír* 'become red' (1898), *pyíl* 'thither' (1876, 72; but 1898 has *pyíl*, *píl*, *pyíl*, and *píl*), *myíl* 'below' (1876, 72), *thyíl-la* 'successively' (1876, 76; but 1898 has *thyíl* and both *thíl* and *thíl*). In syllables ending in (i) *t*, *p*, or *m*, on the other hand, or (ii) the vowel symbol itself, Mainwaring commonly uses *í*, e.g. (i) *nyít* 'cherish', *mít* 'female', *'á-tím* 'large', *'á-lím* 'heavy' (1876, 137, 25, 30, 30), *pa-híp* 'drinking tube', *'íp* 'squeeze' (1898), (ii) *sung-lí* 'net', *dí*, *thí* (1876, 132, 111, 111). This distribution suggests to me that Mainwaring might have been influenced to

⁷ Except for *i* in *ting-leng* (line 35), presumably an error; for it appears as *ting-leng* in line 32.

depart from the earlier orthographic tradition by purely phonetic features, the difference in quality between the more open and somewhat centralized vowel (ɪ) characteristic of closed syllables ending in a velar (k, ŋ), a dental nasal (n), or r or l, on the one hand, and the close front quality (i) appropriate to closed syllables ending in a dental stop (t) or a bilabial (p, m) and open syllables.

B. *a*

Another interesting respect in which the Hooker 1849 text differs from Mainwaring, 1876, and Mainwaring, 1898, is in its use of the vowel symbol *a*; indeed the author of the text himself varies somewhat in his own use of this symbol: (i) *sam* alternates with *sám* for the same lexical item, 'three', the former occurring on lines 1, 17, 29, 33, and 34, and the latter on line 10 (Mainwaring, 1876, gives *sám* (115); but Mainwaring, 1898, gives both); *far* occurs, for 'price', on line 12, but *fár* on lines 4, 8, 9, 11, 25, and 29 (Mainwaring, 1876, *fár* (144)).

Either spelling, *sam* or *sám* and *far* or *fár*, is, in fact, valid for these two lexical items, because of an overlap in symbolization. This is due to the fact that a distinction in vowel-final syllables that requires the separate symbols *a* and *á* does not apply in consonant-final syllables, and therefore makes this degree of variation in spelling possible.

1. *Vowel-final syllables*: *a* versus *á* and *e*

(a) *Stressed syllables*

In vowel-final syllables, provided that these syllables are stressed, *a*, *á*, and *e* symbolize phonological vowel units characterized by the following features:

<i>a:</i>	half-close	central	spread	long ə :
<i>á:</i>	open	front/back	non-rounded	long a :/ á :
<i>e:</i>	(i) half-close	front	spread	long e :
	(ii) half-open	front	spread	long ɛ , e.g.
<i>a:</i>	<i>tsha</i> , <i>dá</i> (lines 10, 31)			
<i>á:</i>	<i>thá-lá</i> , <i>kúm-pá-nyi</i> , <i>rá</i> , <i>dá</i> (lines -1, 1, 1, 38)			
<i>e:</i>	(i) <i>je</i> , <i>ci-nye</i> , 'o-re (lines 17, 26, 37)			
	(ii) <i>gye</i> 'win', <i>the</i> 'depart' (Mainwaring, 1898, 61, 154)			

The symbol *e* occurs infrequently in the text, and therefore provides examples of only one of the two phonologically distinct vowel units for which it has to do duty; but the functional load carried by this distinction is, in any case, light: the number of lexical items in which the latter unit occurs is small; and they are confined to loan-words from Tibetan (cf. also Sprigg, to appear (a)).

Consequently, only eight out of the nine vowel units that are phonologically distinguished in vowel-final syllables are exemplified in the 42 lines of the text, e.g.

i:	e:	ɛ:	u:	ə:	a:	u:	o:	ɔ:
<i>dí</i> ,	<i>je</i> ,	—,	<i>tsu</i> ,	<i>tsha</i> ,	<i>rá</i> ,	<i>ka-jú</i> ,	<i>zo</i> ,	<i>chó</i>

(lines -1, 17, —, 1, 10, 1, 9, -1, 12), to which may be added from elsewhere, as an example of **ɛ**, *gye* (and *gyal*, Mainwaring, 1898) 'win' (Tib. *rgyal*).

In nasal-initial syllables, however, in which the vowel is nasalized, only six

vowel units can be phonologically distinguished in vowel-final syllables, four of which are exemplified in the text, e.g.

i: ē: ỹ: ā: ū: ǫ:
má-nyi, ci-nye, —, 'á-ná, 'á-nyo, —

(lines 13, 26, —, 2, 4, —), to which can be added, as examples of ỹ: and ǫ: from elsewhere, *ngu* (ỹ:) 'get threadbare', and *mó* (ǫ:) 'sore' (Mainwaring, 1898; cf. also Sprigg, to appear (a)).

In the Hooker text the two examples of syllable-final *a*, *tsha*, and *da* (lines 10, 31), belong to a typologically different category of symbol from those of the other seven vowel symbols exemplified there (*i*, *e*, *u*, etc.): their symbolization is not alphabetic but syllabic; and a single symbol serves for the whole syllable, both the initial consonant and the vowel, e.g. both for the **tsh** and for the **ə**: of *tsha* (10). The vowel unit of each of the other seven types of example in the text, on the other hand, and for **ɛ**: exemplified in *gye* above, is symbolized separately from the consonant, and is, therefore, alphabetic, whether prescript (*i*, *o*), subscript (*e*), or postscript (*u*, *á*, *ú*), or both prescript and superscript (*ó*). Mainwaring also uses this syllabic type of spelling for *tsha* 'date' (1898) and for *da* 'lake' (1876, 139); but for certain other examples of this same vowel unit **ə**: his symbolization is alphabetic, through the use of the superscript vowel symbol *rán*, e.g. 'á, *yá* ('warm', 'know'; 1876, 111, 133; Grünwedel, however, in Mainwaring, 1898, gives alternative spellings of these lexical items, 'á/'*a* and *yá*/*ya*); and, for another such lexical item, his symbolization is of both types: *ka/ká*, e.g. 'á-*ka* and 'á-*ká* 'hand' (1876, 19, 122).⁸ If this *rán* symbol were to be used consistently for the **ə**: vowel unit in the vowel-final type of stressed syllable, and *tsha*, *da*, and 'á-*ka*, for example, were to be regularly written as *tshá*, *dá*, and 'á-*ká*, the symbolization of the vowel units (and the initial-consonant units too) would be entirely alphabetic.

(b) *Unstressed syllables*

Certain lexical items occur in both a stressed and an unstressed position in disyllabic words, with the result that for them there is a variation in vowel length, between for example, **ə**: in the former position and **ə** in the latter, e.g. **-kə**: in 'á-*ká* 'hand' but **kə**- in *ká-jak* 'forefinger' (Mainwaring, 1876, 134, 138). I have the impression that Mainwaring, 1876, uses *á* in unstressed syllables, e.g. *ká-jak*, only for stressable lexical items, those which also occur in stressed position, e.g. 'á-*ká*; otherwise he uses *a* in unstressed syllables, e.g. *sa-'ár, la-vo, fa-lí* (**sə**-, **lə**-, **fə**-; 131, 20, 115); and in this respect his usage is the same as that of the Hooker text: *sa-'ár, la-vo, fa-lí* (-1, 1, 5a).

Since the distinction made between **ə**: and **u**: in stressed syllables (section (a) above) does not apply in unstressed syllables, in which only **ə** occurs, there is sometimes alternation in spelling between *a* and *u*, e.g. *ma-zu* (**mā**-) 'body' (Mainwaring, 1876, 141), for which Mainwaring, 1898, gives both *ma-zu* and *mu-zu*, though with a preference for the former. Since, however, the first lexical item of this compounds seems to be *mu* 'body', the latter spelling should be preferable on etymological grounds. In the case of the compound verbs *bu-lát* 'bring from a definite distance' (5b), *bu-thi* 'bring to hand' (19), and *bu-dít bo* 'bringer' (36), in each of which the first lexical item, *bu*, has its unstressed form **bə**, the spelling with *u* agrees with the stressed-syllable pronunciation of that lexical item, **bu**: 'carry' (no example in the Hooker text;

⁸ Mainwaring, 1898, gives both *ka* and *ká* for this lexical item; but *ká* is much the commoner.

but cf. the closed-syllable form in *bun bo b̥n* 'carrier', 37); the spelling *bu* for *bə-* in these compound verbs is, therefore, etymologically satisfactory.

2. Consonant-final syllables

In consonant-final syllables alternation in spelling has already been shown to occur even in the text itself. The type of alternation varies somewhat with the type of syllable-final; thus, for syllables containing a final labial or dental consonant, or a rolled or lateral consonant (symbolized by *p*, *m*, *t*, *n*, *r*, or *l*) an alternation in symbol is possible between *a* and *á*, and, for some Lepcha writers, between *a* and *e*; but for syllables containing a final velar (symbolized by *k* or *ng*) the alternation is between *a* and *ó*. I take the former type of alternation first.

(a) syllable-final *p*, *m*, *t*, *n*, *r*, *l*

In dealing with syllables of this type a further division can usefully be made into syllables with (i) final *-ap*, *-am*, *-at*, *-an*, *-ar*, and *-al*, on the one hand, and (ii) final *-yap*, *-yam*, *-yat*, *-yan*, *-yar*, and *-yal*, to which can be added, for some speakers, syllables with an initial alveolo-palatal affricate (symbolized by *c* and *ch*) or fricative (*j*), or an initial palatal nasal (*ny*).

(i) *-ap*, *-am*, *-at*, *-an*, *-ar*, *-al*

I have already called attention to alternations within the Hooker text itself in the introductory paragraph to section (B), between *sam* and *sám* (lines 1, 17, 29, 33, and 34 versus 10), and between *far* and *fár* (lines 12 versus 4, 8, 9, 11, 25, and 29). This alternation in symbol between *a* and *á* becomes possible because the half-close central spread vowel unit (ə) is symbolized in consonant-final syllables not by *a*, as in section (1) above, but by *á*, the (superscript) *rân* symbol, e.g. *'ân* (4), *gám-po*, *gám-pú*, and *gám-bo* (17, 17, 34; Tib. *dgon-pa*), and *díng-pân* (35; Tib. *lding-dpon*), thus leaving *a* free to act as an alternative to *á* for the open back/front non-rounded vowel unit (a/a), e.g. *sam* and *sám* (1, 10), *líng-dám* (9; but Mainwaring, 1898, *dám* 'mud'), *thap* (16; but Mainwaring, 1876, *tháp* (115)), *gun-jam* (40; but Mainwaring, 1898, *gun-jám*), *far* and *fár* (12, 4). There are no other examples of *-ap* and *-ar* in the text apart from *thap* and *far/fár*, and no examples of *-at*, *-an*, and *-al*; but such examples as the following can be found in Mainwaring, 1876 and 1898, and in Tamsang, 1981:

<i>-ap</i> : <i>lap</i> 'bury' (1876, 135);	cf. <i>lap</i> , <i>láp</i> (1898), <i>láp</i> (Tam.)
<i>-at</i> : <i>mat</i> 'blow' (1876, 6);	cf. <i>mát</i> (Tam.)
<i>fat</i> 'earth' (1876, 101);	cf. <i>fat</i> , <i>fát</i> (1898), <i>fát</i> (Tam.)
<i>-an</i> : <i>fan</i> 'burn' (1876, 135);	cf. <i>fan</i> , <i>fán</i> (1898), <i>fán</i> (Tam.)
<i>-ar</i> : <i>far</i> 'rust' (1898);	cf. <i>fár</i> (Tam.)
<i>-al</i> : <i>'al</i> 'new' (1876, 6);	cf. <i>'al</i> , <i>'ál</i> (1898)
<i>mal</i> 'dibble' (1876, 6);	cf. <i>mál</i> (1898), (Tam.)
<i>lúk-kal</i> 'tomorrow' (1876, 71);	cf. <i>lúk-kál</i> (Tam.)

It is interesting, but not surprising, to note that Mainwaring, 1898, commonly refers the reader from a spelling in *-ap*, *-at*, etc., to a spelling in *-áp*, *-át*, etc., and vice versa, e.g. 'tap see *táp*', 'bam i.q. *bám*', 'mat i.q. *mát*', 'ban see *bán*', 'var, var-ra see under *vár*', 'fál i.q. *fál*'.

In the following table I give examples of all possible types of syllable final appropriate to this section, with a supporting lexical item each, giving preference to syllables from the Hooker text, but, where it provides no examples,

drawing on Mainwaring, 1876 or 1898, with a reference to Tamsang, 1981 (alternative spellings and lexical items from these other sources have been enclosed in brackets):

ap	am	ar	at	an	al
ə:p	ə:m	ə:r	ə:t	ə:n	ə:l
ɤp	ɤm	ɤr	ɤt	ɤn	ɤl
op	om	or	ot	on	ol
op	om	or	ot	on	ol
ɔp	ɔm	ɔr	ut	un	ul ⁹
{ <i>thap</i>	<i>sam</i>	<i>far</i>	(<i>mat</i>)	(<i>fan</i>)	(<i>'al</i>)
{(<i>tháp</i>)	<i>sám</i>	<i>fár</i>	<i>mát</i>	(<i>fán</i>)	(<i>'ál</i>)
{(<i>báp</i> -)	<i>gám</i>	(<i>yár</i>)	(<i>gát</i>)	<i>'án</i>	(<i>kyál</i>)
- <i>kup</i>	<i>gum</i>	(<i>tur</i>)	(- <i>dyut</i>)	- <i>mun</i>	<i>tul</i>
<i>lóp</i> -	<i>kóm</i>	<i>mór</i>	<i>lót</i>	<i>nón</i>	<i>kól</i> -
- <i>lop</i>	<i>gom</i> -	<i>dor</i> -	(<i>cot</i>)	<i>lon</i>	(<i>col</i>)
<i>rúp</i> -	(<i>lúm</i>)	<i>dúr</i> -	(- <i>shút</i>)	(<i>yún</i>)	<i>húl</i> -

(lines 16, 1/10, 12/4, 28; 17, 4; 35, 1, 17, 5b; 31, 1, 6, 2, 5a, 20; 31, 18, 3, 39; 16, 10, 6); the lexical items in brackets, from Mainwaring, 1898, are glossed as follows, in order of appearance: 'burn', 'new'; 'monkey' (*báp-mo*), 'fowl louse', 'vulture', 'smooth'; 'lukewarm', 'fighting' (*'á-dyut*); 'help', 'pour (water) on'; 'south', 'fat', 'carry'.

For syllables in the Hooker text that are unusual, because they are due to the phonetic spelling of foreign words such as *húl-dár* (Nep. *havaldār* 'sergeant'), *to-lop* (Nep. *talap* 'wages'), *lóp-kró* (Tib. *slob-grwa* 'school'), and, possibly, *shi-dó* (?Tib. *bzhes-tha(g)* 'tobacco', or *bzhes-spro* 'biscuits'), or to place-names such as *rúp-di* 'Doobdi' (Dubdi) and *dúr-ji-líng* and *dor-ji-líng* Darjeeling, I would substitute representative Lepcha lexical items as follows:

op:	<i>chóp</i>	'water' (hon.) (1876, 135)
op:	<i>thop</i>	'get' (1898; cf. also thop <i>thúp</i> , Sprigg, to appear (a))
or:	<i>dor-bi</i>	'mushroom' (1898)
up:	<i>yúp</i>	'suck' (1898) ¹⁰
or:	<i>yúr</i>	'bake' (1876, 143)
ul:	<i>'á-dúl</i>	'lips' (1876, 134).

When the consonant-final type of syllable is compared with the vowel-final type (section (1) above), the following noteworthy differences can be seen in the symbolization of the vowel units **ə:**, **a:/a:**, and **a** in the Hooker text:

	ə:	a:/a:	a
vowel-final syllable:	<i>a</i>	<i>á</i>	
consonant-final syllable:	<i>á</i>		<i>á, a</i>

In consonant-final syllables there is, therefore, over-symbolization: for the **a** vowel unit both *á* and *a* are in use, though either of these two would be enough for the purpose; and, as between the vowel-final and the consonant-final type of syllable, the **ə:** vowel unit is symbolized inconsistently, by *a* in the former type of syllable but by *á* in the latter, though here again either form of symbolization would be sufficient.

At first sight the use of *-ap*, *-am*, and *-ar* in the text for **ap**, **am**, and **ar**

⁹ I symbolizes a palatalized lateral ('clear l') here; in syllables with palatalized initials or alveolo-palatal or palatal initials a closer quality than **ɔ** is appropriate to labial syllable-finals, i.e. **u**; and the **u** of dental-final and lateral-final syllables is fronted.

¹⁰ For the close vowel **u** in this example see note 9.

might appear to be modelled on Tibetan orthography, in which *-ab*, *-am*, and *-ar* regularly symbolize non-rounded vowel units with approximately similar degrees of openness to the Lepcha (**-ɤp**, **-ɤm**, **-ɤ:**) in, e.g. *chab* 'water' (hon.), *zam-pa* 'bridge', *lam* 'road', *mar* 'butter'; but Lepcha uses a rounded vowel (**ɒ**, **ɔ**) in corresponding loan-words from Tibetan, which it therefore symbolizes by *ó*, e.g. *chóp* (Mainwaring, 1876, 135), *sóm-pu*, *lóm*, *mór* (lines 5b, 25, 6). This is, presumably, because the Tibetan dialect from which these words were borrowed into Lepcha used lip-rounding where other dialects, notably the Lhasa, used non-rounding. I have noted lip-rounding from a speaker of a Kham dialect spoken to the north-west of Kanze; and P. S. Ray reports this same feature, in e.g. *kham*s 'Kham', *yar* 'up', for the Kanze area, in the Upper Yalung (Nyag chu) valley (Sprigg, 1966, 9; cf. also Teichman, 1922, 3, 71-3, 79, 231).¹¹

(ii) *-yap*, *-yam*, *-yat*, *-yan*, *-yar*, and *-yal*; *c-*, *ch-*, *j-*, and *ny-*

Examples of these orthographic types of syllable, in *-ya-*, or, alternatively, in an initial alveolo-palatal affricate (*ca-*, *cha-*) or fricative (*ja-*), or a palatal nasal (*nya-*), are scarce in the Hooker text; they comprise *nyat* and *-lyat* (**-ɛt**), *dyan* (**-ɛn**), and *nyar* (**-ɛr**). To these can be added, from Mainwaring, 1876, *jan* 'bad', *fyan* 'foeman' (6), and *sa-dyar* 'thunderbolt' (20).

There are no examples of *-yap*, *-yam*, and *-yal* in the Hooker text; but Mainwaring, 1876 and 1898, give such examples as:

<i>-yap</i>	-ɛp	<i>lyap</i>	'smeared'	<i>cap</i>	'bore' (1898)
<i>-yam</i>	-ɛm	<i>lyam</i>	'play'	<i>dyam</i>	'put on' (1898)
<i>-yal</i>	-ɛl	<i>jal</i>	'pronounce correctly'	<i>pyal</i>	'weary' (1876, 6, 135)

-yal and *-el*, and *-yar* and *-er*

The example *nyar* of the text (line 1) is spelt *nyer* in Mainwaring, 1898; and the example *jal* above (1876, 6) has an alternative spelling with *-el* (66), while Mainwaring, 1898, refers the reader from *jel* to *jal*. Other examples in which *-yal* and *-el* are given as alternative spellings, and similarly with *-yar* and *-er*, include *kyl*/*kyel*, *nyal*/*nyel*, and *tyal*/*tyel*/*tel*, and *kylar*/*kyer*, *tyar*/*tyer*, and *sa-dyar* or *sa-dyer* (1898). These alternative spellings are equally valid for symbolizing the syllable finals **-ɛl** and **-ɛr** respectively because there is no such distinction as **-ɛl** versus ***-el**, or **-ɛr** versus ***-er**. This means that for Mayel, the Lepcha paradise, either Mainwaring's spelling *ma-yal* (1898) or Tamsang's *má-yel* (1981) is equally valid phonologically (as far as the second syllable is concerned).

-yap, *-yam*, *-yat*, *-yan* versus *-ep*, *-em*, *-et*, *-en*

There is, however, a phonological distinction between a half-close (**ɛ**) and a half-open (**ɛ̃**) vowel for syllables having a labial or a dental final consonant (provided that the syllable-initial consonant is non-nasal; cf. Sprigg, to appear (a)); but, in the Hooker text, examples are confined to *-ep*, *-em*, and *-en*, e.g.

<i>-ep</i>	-ɛp	<i>sá-hep</i>	(17)	<i>-em</i>	-ɛm	<i>lem</i>	(18)
<i>-en</i>	-ɛn	<i>póng-cen</i>	(4; <i>pang-chen</i> , Mainwaring, 1898)				
		<i>gom-chen</i>	(18)				

¹¹ Ray, 1965.

The older Sikkimese Tibetan families claim to have come originally from Kham; the Sikkim royal family claimed to be of Minyak (*me-nyag*) origin, from Nyarong, the lower course of the Nyag chu (Yalung), immediately to the south and south-east of Kanze, for which area cf. Thomas, 1948, 15-16.

The following additional examples of these three syllable finals can be given, from Mainwaring, 1898, especially since *sá-hep* is a foreign word (Nep. *sāheb*), together with examples of *-et*, which is missing from the Hooker text:

<i>-ep</i>	-ep	<i>lep</i>	'press down'	<i>cep</i>	'become dry', 'shrink'
<i>-em</i>	-em	<i>lem</i>	'pile up'	<i>cem</i>	'edge' (vb.)
<i>-et</i>	-et	<i>pyet</i>	'vie (with)'	<i>cet</i>	'interrupt'
<i>-en</i>	-en	<i>len</i>	'than'	<i>fren</i>	'boil' (n.)

In non-nasal-initial syllables, then, either a twofold or a threefold distinction in vowel unit is made as follows, according to type of syllable final (examples that have had to be taken from Mainwaring, 1898, are again given in brackets):

ip	im	it	in	ir	il
ep	em	et	en		
ɛp	ɛm	ɛt	ɛn	ɛr	ɛl , e.g.
(<i>h(y)ip</i>)	(<i>pim</i>)	(<i>thit</i>)	(<i>lin-</i>)	(<i>jir</i>)	(<i>h(y)il</i>)
(<i>lep</i>)	(<i>lem</i>)	(<i>pyet</i>)	(<i>-cen</i>)		
(<i>cap</i>)	(<i>lyam</i>)	(<i>lyat</i>)	(<i>-dyan</i>)	(<i>-dyar</i>)	(<i>jal</i>)

(lines 4; 18, 4; 36, 6); Mainwaring, 1898, 'shave', 'skirt', 'speaker' (*lin-bo*), 'glittering', 'intimate with'; 'press down', 'vie (with)'; 'bore', 'play', 'lightning' (*sa-dyar*), 'pronounce correctly'.

It is interesting to note that certain lexical items that were pronounced with a half-open vowel (ɛ) by K. P. Tamsang, of Kalimpong, a speaker of the Tamsangmo dialect, were pronounced with an open vowel (a) by P. S. Targain, a Renjongmo-dialect speaker, from Sikkim (with corresponding differences in spelling):

	'bore'	'knot'	'wrist'	'ball of thread'
Tam.:	-ɛp <i>cep</i> ;	tɛp <i>tep</i> ;	kə'tɛm <i>ka-tyem</i> ;	ki'tɛm <i>ki-tem</i>
Tar.:	-ap <i>cap</i> ;	tjap <i>tyap</i> ;	kə'tjam { <i>ka-tyam</i> ; <i>ka-tyám</i> ;	ki'tjam <i>ki-tyam</i>

From the above set of examples it will be seen that Tamsang uses syllable-final *-ep* and *-(y)em* to symbolize **-ɛp** and **-ɛm** respectively; since he uses the same symbolization for **-ep** and **-em** respectively too, he obscures a phonetic and phonological distinction that is entitled to be represented in the orthography, and is, in fact, distinguished in the Hooker text by *-yat* and *-yan* versus *-ep*, *-em*, and *-en*, to which can be added, from Mainwaring, 1898, *-yap* and *-yam* versus *-et* to complete the two series (and by *-at*, *-an*, *-ap*, and *-am* versus *-et*, *-en*, *-ep*, and *-em* for syllables containing initial *c-* or *j-*). The functional load carried by this phonological distinction in front spread vowels between half-close (e) and half-open (ɛ) in labial-final and dental-final syllables may not be great; but it is certainly worth symbolizing when it has the warrant of orthographic tradition, both Mainwaring and pre-Mainwaring.

Nasal-initial syllables

The threefold distinction between vowel units with the features **i**, **e**, and **ɛ** in labial-final and dental-final syllables does not apply to syllables containing a syllable-initial nasal; in this latter type of syllable the distinction is only twofold. The only examples in the Hooker text are:

- ɛr** *nyar* (1; but *nyer* in Mainwaring, 1898, and Tamsang, 1981)
- ɛt** *nyat* (13; but *nyet* in Tamsang, 1981)

To these two examples can be added, from Tamsang, 1981, *mer* (-**ɛr**) 'have a nightmare' (?Mainwaring, 1898, *myer* 'see, as in a vision') and, from Mainwaring, 1898, *myat* (-**ɛt**) (i) 'do persistently' and (ii) 'have (something) fly into one's eye'.

The remaining finals of this type, exemplified from Mainwaring, 1898, but following Tamsang's pronunciation, include:

- ɛn**: *man/myan* (Tam. *men*) 'ripe'; *nyan* (Tam. *nyen*) 'listen'
 -**ɛl**: *myál/myel/myal* (Tam. *mel*) 'feathers'; *nyel* 'repeat'

(I have no such examples of -**ɛp** and -**ɛm**).

The twofold distinction in phonological vowel units for this type of syllable can be illustrated as follows (examples from Mainwaring, 1898, have been enclosed in brackets):

ip	im	it	in	ir	il
—	—	ɛt	ɛn	ɛr	ɛl, e.g.
(<i>nyíp</i>)	(<i>mím</i>)	- <i>nyít</i>	<i>nyen?</i>	(<i>nyir</i>)	(<i>myíl</i>)
—	—	<i>nyat</i>	(<i>nyen</i>)	<i>nyar</i>	(<i>myál/myel/myal</i>)

(lines 7 *rung-nyít*, 3, 3, 1); Mainwaring, 1898: 'bind together', 'widow', 'fix', 'down', 'listen', 'feathers'. I have treated the *nyen* 'milk' of the text as an example of -**in** in accordance with Tamsang's pronunciation, his spelling being *nyin*, as opposed to the -**ɛn** of *nyan*, for which his spelling is *nyen*. Apart from this example, which is problematical, the closer of the two vowel units (i/ɪ) is regularly symbolized by *í*, and the more open (ɛ) by *a* in the Hooker text and commonly also by Mainwaring, 1898, but regularly by *e* in Tamsang, 1981: *nyet*, *nyen*, *nyer*, *mel*. Since either spelling is valid for the more open type of syllable, it is not surprising that there is, in Mainwaring, 1898, some variation, e.g. '*nyel* see *nyal* "the gums"', '*myal* see *myel*', '*myer* see *myar*'.

(b) syllable-final *k*, *ng*

(i) *ek*, *eng*

Before passing to a brief account of spellings for the velar finals -*ak*/-*ók* versus -*ák*, and -*ang*/-*óng* versus -*áng*, I would mention that in front-vowel syllables the degree to which vowels are phonologically distinguished is also twofold: a close-to-half-close centralized vowel unit (ɪ) versus a half-close unit (e). The Hooker text contains the following examples:

- ɪk**: *hík*, '*ík* (-1, 16)
 -**ɪŋ**: *ling-com*, *kyo-jing*, *díng*, *shíng* (1, 8, 12, 28)
 -**ek**: *sa-nyek*, *pa-tek* (11, 24)
 -**eŋ**: *tíng-leng* (32),

to which could be added, from Mainwaring, 1898, *num-lyeng* 'girl' and *fa-lyeng* 'youth'.

(ii) -*ak* and -*ang*, and -*ók* and -*óng*, versus -*ák* and -*áng*

The Hooker text contains examples of -*ak* (-**ɔk**) and -*ang* (-**ɔŋ**) as follows:

- ɔk**: *ka-kyak*, *ta-rak*, *yak-sóm* (7, 26, 27)¹²
 -**ɔŋ**: *sang*, *bá-dang* (2, 3).

¹² For *yak-sóm*, the etymology of which appears to be 'top bridge', Mainwaring, 1898, gives '*yúk-sám* "lama" "three" ... the place of meeting of "the three lamas" to choose a *râjâ* for the Lepcha's [sic]'. *Sikkim*, 1894, however, gives Yaksun (ii) and Yoksom (10).

The text's three examples of *-ak* all have the same spelling in Mainwaring, 1876 (115, 115, 27), and in Mainwaring, 1898, though the latter mentions *sóng* as an alternative to *sang* 'in Mscpts.'; but Tamsang, 1981, gives *ka-kyók* and *ta-rók*.

In section (1) above I pointed out that in vowel-final syllables *a* and *ó* symbolize different vowel units, *ə*: and *ɔ*: respectively, e.g.

- a* *-ə*: *tsha*, *da* (10, 31)
 -*ó* *-ɔ*: *chó*, *lóp-kró*, *ló*, *shí-dó* (12, 31, 36, 38),

but that in consonant-final syllables the *ə*: vowel unit is symbolized by *á* (2.a.i). In the Hooker text there are no examples of this use of *á* in syllables containing *-k* and *-ng*; but Mainwaring, 1876, provides the following examples:

- ák* *-ə:k* *thyák* 'spring upwards'; *ngák* 'look' (78, 68)
 -*áng* *-ə:ŋ* *dáng* 'run'; *hyáng* 'cold' (112, 30).

The effect of this is that *a* is again left free to alternate with one of the vowel symbols, but not with the same vowel symbol (*á*) as it alternates with in labial-, dental-, rolled-, and lateral-final syllables, as in (2.a.i) above; in velar-final syllables *a* alternates with *ó*, e.g.

- ók*: { *ka-kyak*, *ta-rak*, *yak-sóm* (7, 26, 19); *lak* 'pour' (1876, 6)
 { *hyók*, 'á-rók' (-1, 24); *chók* 'hand', *ka-lók* 'rat' (1876, 134, 131)
 -*ong*: { *sang* (2); *lang* 'stone', 'á-plang' 'upon' (1876, 6)
 { *tsóng*, *póng-cen*, *krá-tshóng*, 'óng, *nóng* (1, 4, 6, 8, 11)

Not surprisingly there is some degree of variation between *-ak* and *-ók* for syllable-final *-ók*, and between *-ang* and *-óng* for *-ong*. For the *póng-cen* of the text (4) Mainwaring, 1898, gives both *pang-chen* and *póng-chen*, for *sang* it gives ' (in Mscpts. *-sóng*) ', for *róng* 'Lepcha' 'also *rang*', and for 'tiger' both *sa-thang* and *sa-thóng*.

Tamsang, 1981, entirely ignores *-ak* as a means of symbolizing *-ók*, and uses only *-ók*, e.g. *ka-kyók* 'seven', *ta-rók* 'six', *lók* 'pour', *mók* 'target', while for *-ong* he uses *-óng* alone, apart from the following list of nine words: *sang* plural suffix, *pang* plural suffix, *bang* 'group', 'á-plang' 'upon', *gang* 'if', *shang* future suffix, 'á-lang' 'now', *zang* 'like', *lang* 'stone'. I am unable to give any phonetic reason for this distinction, except that Targain felt that the vowel was shorter in the examples spelt with *-ang*. Since, with the exception of *lang* 'stone', they are particles and other such forms, they are likely to be less prominent than nouns, verbs, and adjectives; so his intuition may be correct, though I was not convinced that a length difference was made consistently.

It would be reasonable to expect the *-ak* and *-ang* spellings for *-ók* and *-ong* to be modelled on the *-ag* and *-ang* of Tibetan (cf. also, for *-ap*, *-am*, etc., (a.i) above), the lip-rounding that these spellings symbolize in Lepcha being borrowed from the Kham dialect of the Tibetan immigrants into Sikkim of three or four centuries ago (cf. Sprigg, to appear (b)); but these spellings also occur in words from the original Lepcha component of the language, such as *ka-kyak*, *ta-rak*, *lang*, and 'á-plang' above as well as in loan-words from Tibetan such as *pak-chó* (also *pók-chó*; Tib. *bag-chags*) 'passion', *rak* (Tib. *rag*) 'brass', *rang* (Tib. *rang*) 'self', *sang-gye* (also *sóng-gyó* and *sáng-gye*; Tib. *sangs-rgyas*) 'Buddha'. On the other hand, it is difficult to regard *-ók* and *-óng* as a purely Lepcha spelling device: it appears in loan-words from Tibetan such as the 'á-rók' of the text (line 24; Tib. *a-rag*), and *nók* 'ink' and *kók* 'hinder' (Tib.

snag, 'gag), and in the *tsóng*, *póng-cen*, and *krá-tshóng* of the text (lines 1, 4, 6; Tib. 'tshang, bang-chen, grwa-tshang).

Having already given examples of the velar-final type of syllable when containing front-vowel units, I now, for the sake of comparison and completeness, give a set of the six remaining phonologically distinct vowels (with examples from Mainwaring, 1876, again enclosed in brackets) :

nk	ŋ	{	<i>ka-kyak</i> , <i>ta-rak</i> ;	<i>sang</i> , <i>bá-dang</i> (7, 26 ; 2, 3)
			<i>hyók</i> , 'á-rók ;	<i>tsóng</i> , <i>nóng</i> (-1, 24 ; 1, 56)
ak	aŋ		<i>rák</i> , ('á-thyák) ;	<i>sháng</i> , ('á-bryáng) (10 ; 35)
ək	əŋ		(<i>ngák</i>), (<i>thyák</i>) ;	(<i>dáng</i>), (<i>hyáng</i>)
ɤk	ɤŋ		<i>lá-buk</i> , <i>tuk-tuk</i> ;	<i>cúng-pung</i> , <i>lung</i> (18, 13 ; 14, 1)
ok	oŋ		<i>lúk</i> , <i>búk</i> ;	'úng, <i>sóng-cúng</i> (15, 30 ; 7, 22)
ok	oŋ		<i>pun-lok</i> , (<i>rok</i>) ;	<i>kur-dong</i> , <i>tsong</i> (31 ; 3, 14)

(Mainwaring, 1876, 133 'head', 135 'name' ; 68 'look', 78 'spring upwards', 112 'run', 30 'cold' ; 145 'read'.)

Some of the above examples from the text are lexically a little strange, place-names, like *bá-dang* and *cúng-pung*, and foreign words, like *rák*, *sháng*, and *sóng-cúng* ; the following more usual examples, from Mainwaring, 1876, can be substituted for them :

-ŋ	-ak	-aŋ	-ɤŋ	-oŋ
<i>lang</i>	<i>ják</i>	<i>sháng</i>	'á-fung	<i>súng</i>

(6 'stone', 134 'tongue', 132 'firewood', 135 'corpse', 133 'speak').

Short and repetitive though it is, Hooker's account of his expenses in Lepcha, which has survived among his papers at Kew for well over a hundred years, can serve, with the help of a few examples from Mainwaring and Tamsang, as a useful introduction to the study of Lepcha orthography and phonology, especially through alternative spellings of the same lexical item.

APPENDIX

When we crossed over Singalilah, gave one *thala* baksheesh when goats, rice, and fowls were provided.

These are accounts of Company rupees. Reaching Lingcham when three days of the waning moon of Ra (2nd month) had been completed, bought one *thala*'s worth of salt. Bought rice for one rupee and a *thala*. Gave six annas' worth of rice for the journey for the departing Muse people. Having completed the journey, after two annas' worth of milk on reaching there, two annas' worth of milk. [Adding it up it is a *thala* and a *suki*.] Two annas' worth of plantains. Badong ; gave two rupees to the lady. Gave two rupees to the messengers who arrived. [Adding it up it is three rupees.] Besides, two annas as price of one fowl. Gave four rupees to the four Lingcham men who went up to the bridge. When about to go up from Lingcham on completing five waning days, one *thala* baksheesh in return to those who brought and provided plantains and barley flour. The havildar received four annas' worth of curds ; received one anna's worth of butter. One *thala* for the hermitage certificate. [Adding it up it is one rupee and seven annas.] On completing the journey to the river Rungeet, five pice worth of eggs. [Adding it up it is one *thala*.] On completing the journey to the river Rungeet, gave two annas to two children. At Mungbreu gave two annas as price of a fowl. Reached Kewzing, and gave one *thala* as price of a fowl. Gave one rupee as price of a dog. Reached Lingdam, and gave a *thala* for one fowl. Gave six annas for one fowl. Reaching

Neongong on completing the third day, gave one rupee to those who went down to Darjeeling with mail. One *thala* went on buying rice. Gave two annas as price of Neongong milk. Reached Sunnook, and gave one *thala* as price of a fowl. Gave one *thala* by arrangement for milk, and radish and garlic vegetables. Reaching Tassiding bought one rupee's worth of rice. On completing the seventh day, reaching Pemiongchi, gave one *thala* as the price of one cap. Gave one *thala* to the 'mani' chanter. Gave one *thala* to a Limbu. Reaching Tchongpong gave one rupee to someone who provided beer and rice. When the rice had arrived, bought five rupees and a *suki*'s worth of rice. Going up, bought one rupee and a *suki*'s worth of rice. Gave one *thala*, by arrangement, for one fowl, eggs, and milk. Further, when a woman brought two fowls and husked rice, gave twelve annas baksheesh. When we reached Doobdi monastery, on completing the twelfth day, gave two rupees to the priest. The Sahib himself gave three rupees for the Monastery to accept. When just about to go towards Jongri on completing the thirteenth day, gave one rupee and a *suki* baksheesh to someone who arrived carrying a load of beer, eggs, and radishes. Gave one *thala* baksheesh to someone who brought and supplied milk, radishes, and eight eggs from the hermit. On having completed the journey from Jongri to Yoksun on completing the nineteenth day, when a woman brought a beer load, two fowls, cock and hen, garlic and walnuts, gave one rupee and a *suki* of the Sahib's as baksheesh. When Chu Lamo, a nun of Doobdi, arrived, when she brought one goat, one fowl, eight eggs, four small *songs* (copper containers) of butter, one *fri* of rice, and garlic, in total, gave one rupee and a *suki*. When the clergy brought two napkins of beer, one *fri* of husked rice, four eggs, and two bottles of milk, the Sahib [gave] one *thala* baksheesh. When a high-ranking person of Badong brought a fowl, one vessel of arrack, milk, and wood for sale, on completing the twentieth day, gave one rupee baksheesh. Gave twelve annas to someone who guided us on the road when we went to Jongri. Gave one rupee as the price of rice. When a Limbu of (?) Khyumshum brought one beer load, one *fri* of rice, and six eggs, gave one rupee and a *suki* baksheesh. When the steward, having come down, brought eight eggs and one *fri* of husked rice, gave one *thala* and a *suki* baksheesh. At Yoksun, on completing the twentieth day, when I gave one score of rupees of the Sahib's, gave two rupees baksheesh to someone who brought, in all, one goat, one beer load, and wood for sale. Gave three annas as the price of Yoksun milk. Reaching Lungschung temple on completing one waning day, when rice, eggs, milk, yams, garlic, and wood were provided, gave two rupees baksheesh. One rupee went for the Katsuperri monastery to receive. One rupee went when the lake received it. After the monks came down, gave two rupees baksheesh when the people from the school served beer, radishes, and a pot of wild-bee honey. On completing two waning days, when we reached Tengling, after the magistrate gave one goat, parched rice, and millet, when they provided the load of beer, rice, and wood, all told, gave three rupees baksheesh. At Tchongpung bought one *thala*'s worth of rice. Reached Changachelling monastery; reached three waning days complete; two rupees went for the Monastery to accept. Coming to an agreement over rice and salt, bought one rupee's worth. The Lingcham Captain came; gave two rupees salary to the beer-boy who went to Jongri. Gave one *thala* wages to the two who brought a load from Tengling. On completing four waning days, when we reached, and rested at, the river Kulhait, gave one *suki* as the price of milk. Climbed up from that place; reached Hee; gave one rupee to someone carrying a load. On completing six waning days, when we reached, and rested

at Garat, on the Rungeet, gave one rupee baksheesh when the jemadar provided (?) tobacco. Gave one rupee wages to someone carrying a load from Kulhait to Darjeeling. Gathering it all together.

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